

GAMMA WATERMARKING

ABSTRACT OF THE DISCLOSURE

A covert, gamma-ray "signature" is used as a "watermark" for property identification. This new watermarking technology is based on a unique steganographic or "hidden writing" digital signature, implemented in tiny quantities of gamma-ray-emitting radioisotopic material combinations, generally 5 covertly emplaced on or within an object. This digital signature may be readily recovered at distant future times, by placing a sensitive, high energy-resolution gamma-ray detecting instrument reasonably precisely over the location of the watermark, which location may be known only to the object's owner; however, the signature is concealed from all ordinary detection means because its exceedingly 10 low level of activity is obscured by the natural radiation background (including the gamma radiation naturally emanating from the object itself, from cosmic radiation and material surroundings, from human bodies, etc.). The "watermark" is used in object-tagging for establishing object identity, history or ownership. It thus may serve as an aid to law enforcement officials in identifying stolen property and 15 prosecuting theft thereof. Highly effective, potentially very low cost identification-on demand of items of most all types is thus made possible.